

The Macrolepidoptera of Eastbourne (Excluding Butterflies)

By MARK HADLEY*

Eastbourne and its environs has attracted a great deal of attention from collectors in the past, and comprehensive accounts have been published, e.g. Adkin (1930), but in the intervening decades little, if any, attention has been paid to this area of outstanding entomological interest. Adkin's work was fairly comprehensive in that nearly 480 species have been known to occur in this region. Before this, the first well-documented literature cited by the late Robert Adkin was a list by Jenner (1885).

Since Adkin's list was published, only a single article has appeared in the *Transactions of the Eastbourne Natural History and Archaeological Society*, namely by Salvage (1953). The latter, who is still resident in the area, was able to furnish the writer with useful information.

As far as present-day investigation is concerned, the area has been worked mainly by Dr. Ian Watkinson who has provided the Society with many records. The present writer, resident in Eastbourne, has currently been engaged on compiling a list of the Macrolepidoptera for the Society. The purpose of this paper is to provide a condensed and selected version of some of the more interesting species observed over four years.

The extent of the survey is limited to an area of a radius of seven miles from the Town Hall; this embraces as wide and varied environments for Lepidoptera as is conceivable, from the shingle expanses of the Crumbles to the waterlogged Pevensey Levels. A major forest is encompassed, namely Friston, a dense coniferous area with beech and sycamore plantations. The survey area also includes species from the Chalk Downs, and the deciduous woodland of Milton Hide and Abbot's Wood. A comparison between the distribution of species which the writer has found, and the species which Adkin has listed can give a useful indication of the trend in moth populations. It must be understood, however, that although Adkin's list contains 480 species his information was drawn from many sources, from old county histories and literature concerned with the area. Adkin had compiled all the information together in three volumes, whilst the present writer has only recorded over the past few years species which he has himself captured or seen.

Of the 214 species which the writer has recorded, 11 go completely unmentioned in Adkin's list. *Lygephila pastinum* Treits., later noted in *Transactions of the Society*, three specimens taken in July 1976. *Heliophobus albicolon* Hbn., a single specimen caught. *Eupithecia succenturiata* L., *Euphyia luctuata* D. & S., *Ectropis crepuscularia* Hbn., *Sterrrha vulpinaria* H.-S., *Euxoa cursoria* Hufn., *Drepana cultraria* Fabr., *Caradrina ambigua* Fabr., *Cosymbia linearia* Hbn., and

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Spaelotis ravida Hbn. Several specimens have been collected of the last nine species.

Of the remaining 203 species, 18 have increased their populations, 64 species have decreased and the remainder have remained at their earlier level. This is significant information; from the species that have been recorded recently, approximately one-third are decreasing, the rest are either increasing or remaining stationary.

The criteria upon which the moth populations were assessed: Rare. The species is only known to have occurred once or twice. Uncommon. The species is known from several specimens. Common. The species is taken regularly, every year. Abundant. Found in great profusion, every year.

A short discourse on several species which have notably increased or decreased since Adkin's time is of interest, as these changes have in some instances been dramatic. For example, a moth which has increased is *Agrotis puta* Hbn. Adkin writes: "Generally distributed throughout the district but apparently not very common . . ." This is misleading in our present context as in July of most years the light traps are full of this species. Perhaps a satisfactory explanation is that the majority of recording is performed with the aid of light traps, which were only being experimented with in Adkin's day.

Euxoa nigricans was occurring sparingly on the Downs in Adkin's time, it is now commonly taken in suburban gardens and upon the Downs. Another moth which has attracted a lot of attention in the past is *Apamea ypsilon* Borkh.; the Crumbles have a fine white form of this species quite peculiar to this type of habitat. This was so in Adkin's time and, although the population is still strong in this one restricted locality, we are likely to lose it if present plans for the "development" of this area are carried out. A moth we are likely to see more of in this area is *Nola albula* Hbn. which was formerly confined to a small colony in Abbots Wood but has been recorded elsewhere in the district, although nowhere commonly.

Lygryx prunata L., is quite common in June/July throughout the area but favours established gardens as it did in Adkin's survey, and in 1905 (*Victoria County History*). It occurs sparingly upon the Downs and at Beachy Head. Another species which has increased is *Discestra trifolii* Hufn. It occurs throughout the area in two broods, a first flight in early June till early July and a second flight at the beginning of August. *Ematurga atomaria* L. was a great rarity but is now quite common at a restricted marshy area in Milton Hide.

D. cultraria has turned up again in the area after a long absence. A single specimen was taken at Ratton Wood and a second at Friston. *Lithosia complana* Linn., is quite a common moth and is attracted in good numbers to light at Beachy Head and Ratton Wood. This species had previously been regarded as somewhat of a rarity.

Unfortunately many species have declined in the inter-

vening decades. *Polychrisia moneta* Fabr., was common many years ago. Adkin wrote of this species as "fairly frequent in gardens throughout the district from June to September". Only two specimens have been found over the last three years, although both these were in gardens. The history of the occurrence of this species in the British Isles only dates back to 1890, see South (1961). *Catocala nupta* L. was once "abundant" at Eastbourne; Jenner said of this species: "Generally distributed and rather common." Adkin echoed this view and gave, in addition, Abbot's Wood and Pevensy as suitable localities. It has been rather uncommon in recent years with isolated individuals occurring sparingly.

Eastbourne, due to its maritime location, has furnished good records of immigrant Sphingids: migrants *Herse convoluti* L. and *Acherontia atropos* L. are frequently associated with the area. Of the area's resident Hawkmoths, *Deilephila elpenor* L. and *D. porcellus* L. are common, and the former is widespread in woods and gardens alike. The later prefers the Downs but frequents lights in the town. *Mimas tiliae* L., *Laothoe populi* L. and *Sphinx ligustri* L., are common but widely distributed.

In 1907, 1916 and 1917 large areas of Eastbourne were defoliated by the gregarious larvae of *Euproctis chrysorrhoea* Hbn. This moth is found in abundance at Beachy Head annually where the larvae can browse on the large patches of blackthorn. However, in recent years this species appears to be moving inland and the silken tents of the larvae have been found on elm and hawthorn at Belle Tout, sallow on the Crumbles, and on hawthorn at Newhaven. The nests were absent from the Beachy Head locality for the first time in 1975, but isolated adults have been trapped in that area. *E. similis* Fuessly has declined appreciably since Adkin wrote of it, with only a few instances of the larvae being found of late.

On reflection, the mothing scene at Eastbourne appears hopeful, providing that industrial development does not result in the wholesale elimination of the levels by drainage, nor the encroachment of housing on the Downs.

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